

## CURRENT STATUS OF THE CLAIMS

### In the Claims

The following is a marked-up version of the claims with the language that is underlined ("\_\_\_\_") being added and the language that contains strikethrough ("—") being deleted:

1. (Currently amended) A pharmaceutical composition comprising:  
an isolated SED1 polypeptide having an amino acid sequence selected from SEQ ID NOs: 2, 4, 5, 6, or 7, and comprising at least one discoidin/C-domain, wherein the polypeptide is in an amount effective to modulate inhibit mammalian gamete adhesion, or in an amount effective to promote mammalian gamete adhesion.
  2. (Canceled).
  3. (Previously presented) The composition of claim 1, further comprising a pharmaceutically acceptable carrier or excipient.
  4. (Previously presented) The composition of claim 1, wherein the polypeptide competitively inhibits *in vivo* or *in vitro* binding of sperm to unfertilized zona pellucida.
  - 5-7. (Canceled).
  8. (Currently amended) The composition of claim 1, wherein the isolated SED1 polypeptide binds to male gametes, female gametes, male and female gametes, zona pellucida, or combinations thereof.
  9. (Currently amended) The composition of claim 1, wherein the isolated SED1 polypeptide is a recombinant polypeptide comprising SEQ ID Nos. 2-7 or a fragment thereof, wherein the recombinant polypeptide modulates mammalian gamete adhesion.
- 10-52. (Canceled)